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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/749,937	12/29/2000	Donald Brent Marshall	56130.000045	6809

7590

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Washington, DC 20006-1109

EXAMINER

PHAN, TAM T

ART UNIT	PAPER NUMBER
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2144

DATE MAILED: 04/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/749,937

Applicant(s)

MARSHALL ET AL.

Examiner

Tam (Jenny) Phan

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2001.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-26 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 29 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. Claims 1-26 are presented for examination.

***Priority***

2. No priority claims have been made.
3. The effective filing date for the subject matter defined in the pending claims in this application is 12/29/2000.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. Claims 1-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Lumelsky et al. (U.S. Patent Number 6,463,454), hereinafter referred to as Lumelsky.
6. Regarding claim 1, Lumelsky disclosed a system for enabling distribution of service functionality across network elements in a network comprising: a) a service logic execution engine for enabling service logic to execute on one or more nodes in the network (Figures 2 & 10; column 23 lines 62-67); b) a determination means for determining a preferred distribution scheme wherein the distribution scheme involves placement of nodes (Figures 10 & 12, column 6 lines 21-28, lines 51-60, column 9 lines 50-67); and c) a distribution means for distributing service functionality to nodes in accordance with the distribution scheme (column 6 lines 21-28, lines 51-60, column 9 lines 50-67).

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7. Regarding claim 2, Lumelsky disclosed a system wherein the distribution scheme involves executing where one or more associated physical resources are located (column 13 lines 1-20, column 14 lines 48-55, column 17 lines 18-31).
8. Regarding claim 3, Lumelsky disclosed a system wherein the distribution scheme comprises a selection function to determine one or more nodes to be invoked (Figures 13a-13b, column 12 lines 26-39, column 16 lines 11-25, column 28 lines 61-65).
9. Regarding claim 4, Lumelsky disclosed system wherein the selection function comprises executing an algorithm (Figures 13a-13b, column 16 lines 11-25, column 25 lines 42-54).
10. Regarding claim 5, Lumelsky disclosed a system wherein the distribution scheme involves reducing inter-node interactions (column 7 lines 26-40).
11. Regarding claim 6, Lumelsky disclosed a system wherein the distribution scheme involves making efficient use of network resources (column 4 lines 44-55, column 21 lines 29-53).
12. Regarding claim 7, Lumelsky disclosed a system wherein the distribution scheme involves considering one or more natural couplings of associated service software (column 4 lines 44-55, column 23 lines 38-54).
13. Regarding claim 8, Lumelsky disclosed a system wherein one or more service logic execution engines execute on one or more participating nodes in the network (column 23 lines 62-67, column 24 lines 1-23).
14. Regarding claim 9, Lumelsky disclosed a system wherein multiple parallel servers are capable of executing a service wherein the throughput is scalable to a desired level (column 6 lines 61-67, column 7 lines 1-24, column 12 lines 4-13).

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15. Regarding claims 10-17, the method corresponds directly to the system of claims 1-9, and thus these claims are rejected using the same rationale.

16. Regarding claims 18-26, the processor readable medium corresponds directly to the system of claims 1-9 and the method of claims 10-17, thus these claims are rejected using the same rationale.

17. Since all the limitations of the claimed invention were disclosed by Lumelsky, claims 1-26 are rejected.

***Claim Rejections - 35 USC § 103***

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whited (U.S. Patent Number 6,064,726) in view of Deo et al. (U.S. Patent Number 6,593,355), hereinafter referred to as Deo.

20. Whited disclosed a system for enabling distribution of service functionality across network elements in a network comprising: a) a service logic execution engine for enabling service logic to execute on one or more nodes in the network (Abstract, column 1 lines 25-37, column 3 lines 38-46, column 4 lines 45-55); and c) a distribution means for distributing service functionality to nodes in accordance with the distribution scheme (column 2 lines 44-53, column 3 lines 4-10, lines 38-47, column 5 lines 9-17).

21. Whited taught the invention substantially as claimed. However, Whited did not expressly teach b) a determination means for determining a preferred distribution scheme wherein the distribution scheme involves placement of nodes.

22. Whited suggested exploration of art and/or provided a reason to modify the system with the placement of nodes feature (Figure 1, column 1 lines 25-36).

23. Deo disclosed a system for enabling distribution of service functionality across network elements in a network having a determination means for determining a preferred distribution scheme wherein the distribution scheme involves placement of nodes (column 8 lines 1-22, column 14 lines 1-16, column 25 lines 29-41).

24. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Whited with the teachings to Deo to include the placement of nodes feature in order to support location and platform-independent services (Deo, column 8 lines 14-22) since this would enable high-level logic programs to be run virtually anywhere in the network independent of the service execution platform (column 8 lines 18-22).

25. Regarding claim 2, Deo disclosed a system wherein the distribution scheme involves executing where one or more associated physical resources are located (column 25 lines 20-28, column 26 lines 42-46, column 30 lines 48-54).

26. Regarding claim 3, Whited disclosed a system wherein the distribution scheme comprises a selection function to determine one or more nodes to be invoked (Abstract, Figure 3, column 3 lines 39-47, column 4 lines 44-55, column 5 lines 48-55).

27. Regarding claim 4, Whited and Deo disclosed a system wherein the selection function comprises executing an algorithm (Whites, column 3 lines 28-37; Deo, column 16 lines 22-28).

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28. Regarding claim 5, Deo disclosed a system wherein the distribution scheme involves reducing inter-node interactions (column 14 lines 1-16, column 17 lines 24-31).

29. Regarding claim 6, Deo disclosed a system wherein the distribution scheme involves making efficient use of network resources (column 9 lines 64-67, column 10 lines 1-8).

30. Regarding claim 7, Deo disclosed a system wherein the distribution scheme involves considering one or more natural couplings of associated service software (column 14 lines 48-62, column 17 lines 24-31).

31. Regarding claim 8, Whited disclosed a system wherein one or more service logic execution engines execute on one or more participating nodes in the network (Abstract, Figure 3, column 3 lines 39-47, column 4 lines 44-55, column 5 lines 48-55).

32. Regarding claim 9, Deo disclosed a system wherein multiple parallel servers are capable of executing a service wherein the throughput is scalable to a desired level (column 8 lines 1-22, column 9 lines 10-22, lines 46-54).

33. Regarding claims 10-17, the method corresponds directly to the system of claims 1-9, and thus these claims are rejected using the same rationale.

34. Regarding claims 18-26, the processor readable medium corresponds directly to the system of claims 1-9 and the method of claims 10-17, thus these claims are rejected using the same rationale.

35. Since all the limitations of the claimed invention were disclosed by the combination of Whited and Deo, claims 1-26 are rejected.

*Conclusion*

36. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Yates et al. (U.S. Patent Number 6,330,586) disclosed a services system provides information services over one or more communications networks and has a software infrastructure divided into domains. Each domain has an intelligent software agent and this community of agents sits in a computing environment represented in each domain. The community of agents co-operates to provide service and service management functionality to a user. At least one of the agents is reconfigurable to change the functionality the system makes available. Reconfigurability is based on the use of a plurality of reusable software modules, the agent reconfiguring by selecting a new combination of modules. The software modules themselves incorporate rules, or policies, which determine process steps offered by the modules at run-time.

b. Copley et al. (U.S. Patent number 6,075,854) disclosed a fully flexible method of routing a call to a service subscriber includes obtaining a call plan having a plurality of routing features designed for the subscriber. Network services are generally implemented in a service creation environment through a graphical user interface to produce service logic programs that are then downloaded to network elements such as service management system, service control points, and/or signal transfer point where they are executed

37. Refer to the enclosed PTO-892 for details and complete listing of other pertinent prior art of record.




Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam (Jenny) Phan whose telephone number is (703) 305-4665. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on (703) 305-9705. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Jack Harvey  
SPE  
Art Unit 2142  
703-305-9705

tp  
April 8, 2004

  
JACK B. HARVEY  
SUPERVISORY PATENT EXAMINER